

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-020568**Date Inspected:** 11-Feb-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Shi Zhi**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This Quality Assurance (QA) Inspector observed the following work in progress:

Bay 14

OBG Seg 14W:

Repair welding of weld joint no: SEG3020AL-002 [Floor Beam (FB) 3317A to Side Panel (SP) 3140A/3142A, complete joint penetration (CJP) weld at Panel Point (PP) 125]. The welder is identified as 066398 and was observed welding in the 1G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). AB/F QA was identified as Mr. Wang Jiang Hua. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-1G(1F)-FCM-REPAIR-1. Repair welding was done as per Welding Repair (WR) Report: B-WR 18585 Rev-0.

During inspection this QA inspector observed that the repair excavation at one location was approx 15mm. This depth was observed as more than 65% of thickness of 16mm. The repair welding was in progress as per Welding Repair (WR) Report B-WR 18585. As per AWS D1.5; for Fracture Critical Weld (FCW) if the depth of

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

excavation is more than 65% of thickness, engineer approval is required. This issue has been discussed with AB/F QA Mr. Wang Jiang Hua and CT lead QA. Mr. Wang Jiang Hua informed this QA that this issue would be solved in manner compliant with contract documents. Attached photograph provides additional details.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020BC-021 (East cable Anchorage Brace Plate X5066J to Anchor Plate (AP) 3032A, Fillet weld at PP126). The welder is identified as 067949 and was observed welding in the 2F position. AB/F QA was identified as Mr. Xiao Jun Peng. The welding variables recorded by QC appeared to comply with WPS: B-T-2232-ESAB.

The SMAW process on weld joint no: SEG3020G-018 (Floor Beam (FB) 3340A to Longitudinal Diaphragm (LD) 3048A, CJP weld at PP128). The welder is identified as 066398 and was observed welding in the 3G position. AB/F QA was identified as Mr. Wang Jiang Hua. The welding variables recorded by QC appeared to comply with WPS: B-P-2213-Tc-U4b-FCM-1.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020BC-022 (East cable Anchorage Brace Plate X5066J to Anchor Plate (AP) 3032A, Fillet weld at PP126). The welder is identified as 067764 and was observed welding in the 4F position. AB/F QA was identified as Mr. Xiao Jun Peng. The welding variables recorded by QC appeared to comply with WPS: B-P-2114-FCM-1.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020BE-053 (East cable Anchorage Brace Plate X5072A to Vertical Shear Plate SA3051A, Fillet weld at PP126). The welder is identified as 066734 and was observed welding in the 2F position. AB/F QA was identified as Mr. Xiao Jun Peng. The welding variables recorded by QC appeared to comply with WPS: B-T-2232-ESAB.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020BC-036 (East cable Anchorage Brace Plate X5071D to Vertical Shear Plate SA3448A, Fillet weld at PP126). The welder is identified as 067609 and was observed welding in the 4F position. AB/F QA was identified as Mr. Xiao Jun Peng. The welding variables recorded by QC appeared to comply with WPS: B-P-2114-FCM-1.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020BC-010 (East cable Anchorage Brace Plate X5056G to Anchor Plate (AP) 3032A, Fillet weld at PP126). The welder is identified as 066038 and was observed welding in the 4F position. AB/F QA was identified as Mr. Xiao Jun Peng. The welding variables recorded by QC appeared to comply with WPS: B-P-2114-FCM-1.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020BC-019 (East cable Anchorage Brace Plate X5056H to Vertical Shear Plate SA3445A, Fillet weld at PP126). The welder is identified as 067876 and was observed welding in the 2F position. AB/F QA was identified as Mr. Xiao Jun Peng. The welding variables recorded by QC appeared to comply with WPS: B-T-2232-ESAB.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020BC-020 (East cable Anchorage Brace Plate X5056H to Vertical Shear Plate SA3445A, Fillet weld at PP126). The welder is identified as 069683 and was observed welding in the 4F position. AB/F QA was identified as Mr. Xiao Jun Peng. The welding variables recorded by QC appeared to comply with WPS: B-P-2114-FCM-1.

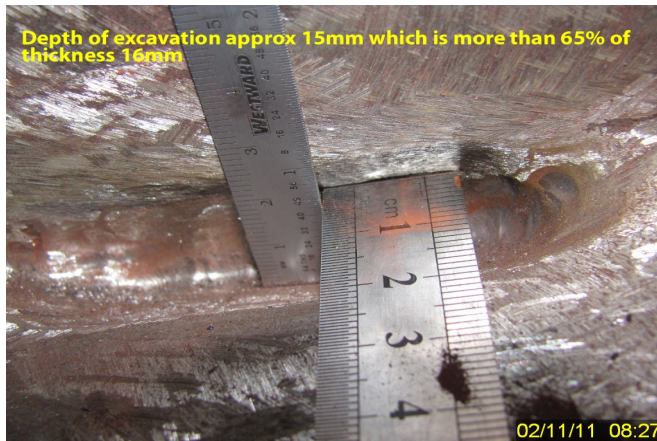
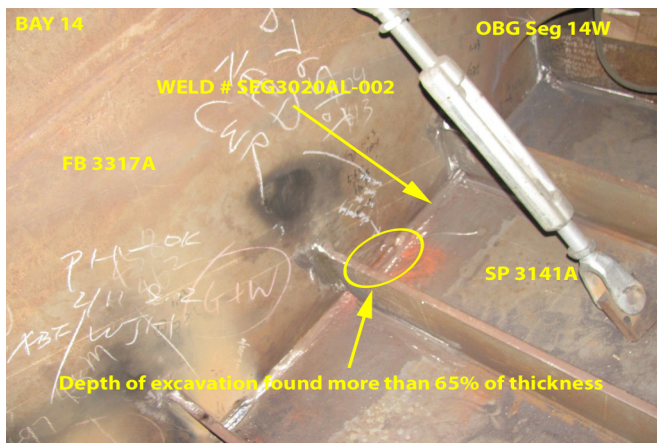
WELDING INSPECTION REPORT

(Continued Page 3 of 4)

The SMAW process on weld joint no: SEG3020J-012 (Floor Beam (FB) 3333A to Longitudinal Diaphragm (LD) 3048A, CJP weld at PP127.5). The welder is identified as 066398 and was observed welding in the 3G position. AB/F QA was identified as Mr. Wang Jiang Hua. The welding variables recorded by QC appeared to comply with WPS: B-P-2213-Tc-U4b-FCM-1.

The SMAW process on weld joint no: SEG3020U-588 (Anchor Plate (AP) 3032A to Bottom Plate (BP) 3087A/3088A, CJP weld at PP126). The welders are identified as 067707, 067904 and 067588 and were observed welding in the 2G position. AB/F QA was identified as Mr. Yan Bao Jia. The welding variables recorded by QC appeared to comply with WPS: B-P-2212-Tc-U4b-FCM-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang : 15000422372, who represents the Office of Structural Materials for your project.

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

Inspected By: Gaikwad,Umesh

Quality Assurance Inspector

Reviewed By: Peterson,Art

QA Reviewer